

## PROTEIN PROFILING PLATFORM

### ABSTRACT OF THE DISCLOSURE

[0142] Methods and compositions are described for analyzing complex protein mixtures, such as proteomes, using activity-based probes. In particular, probes that specifically react with and bind to the active form of one or more target proteins are employed. Labeled peptides obtained from the labeled active target proteins can be used in screening and identification procedures, and can be related to the identity, presence, amount, or activity of active members of the desired target protein class. The methods and compositions described herein can be used, for example, to provide diagnostic information concerning pathogenic states, in identifying proteins that may act as therapeutic targets, and in drug discovery.